
BUTLER COUNTY

(Butler County Water Service Area Map)

- Estimated 1999 population of 11,800-- 90% on public water¹
- Estimated 2020 population of 12,700-- 91% on public water
- 383 miles of water lines, with plans for 24 additional miles
- Estimated funding needs for public water 2000-2005--\$850,000
- Estimated funding needs for public water 2006-2020--\$3,195,000

Butler County had an estimated population of 11,761 (4,766 households) in 1999 with a projected population of 12,700 (5,500 households) in 2020. About 90 percent of Butler County residents have access to public water. Those not on public water relied on private wells. About 50 new households will be placed on public water through line extensions in 2000-2020.

The need for water service expansion in the Butler County water system, Inc. results from growth in Butler County and aging infrastructure. Studies indicate that Butler County will continue to increase in population at a steady rate in the coming years. Currently, many households in Butler County are not served by the water system. To serve these households, the Butler County Water System, Inc. distribution system will require upgrades to increase and maintain an adequate flow and pressure. The approximate costs are outlined in the following project listings. Butler County has 4,966 service connections and 504,000 gallons per day treatment capacity. The costs for the first 5,000 gallons are \$27.76 for the system that reported.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	in \$1000
BUTLER								
BUTLER COUNTY WATER SYSTEM, INC	23.6	50	850					850
BUTLER COUNTY TOTAL	23.6	50	850					850

WATER SERVICE AREAS

BUTLER COUNTY

Kentucky

Prepared By:
Water Resource Development Commission

Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601-8204
502-573-2382 -- 502-573-2939 fax
<http://dlgnt1.state.ky.us/wrdc/>

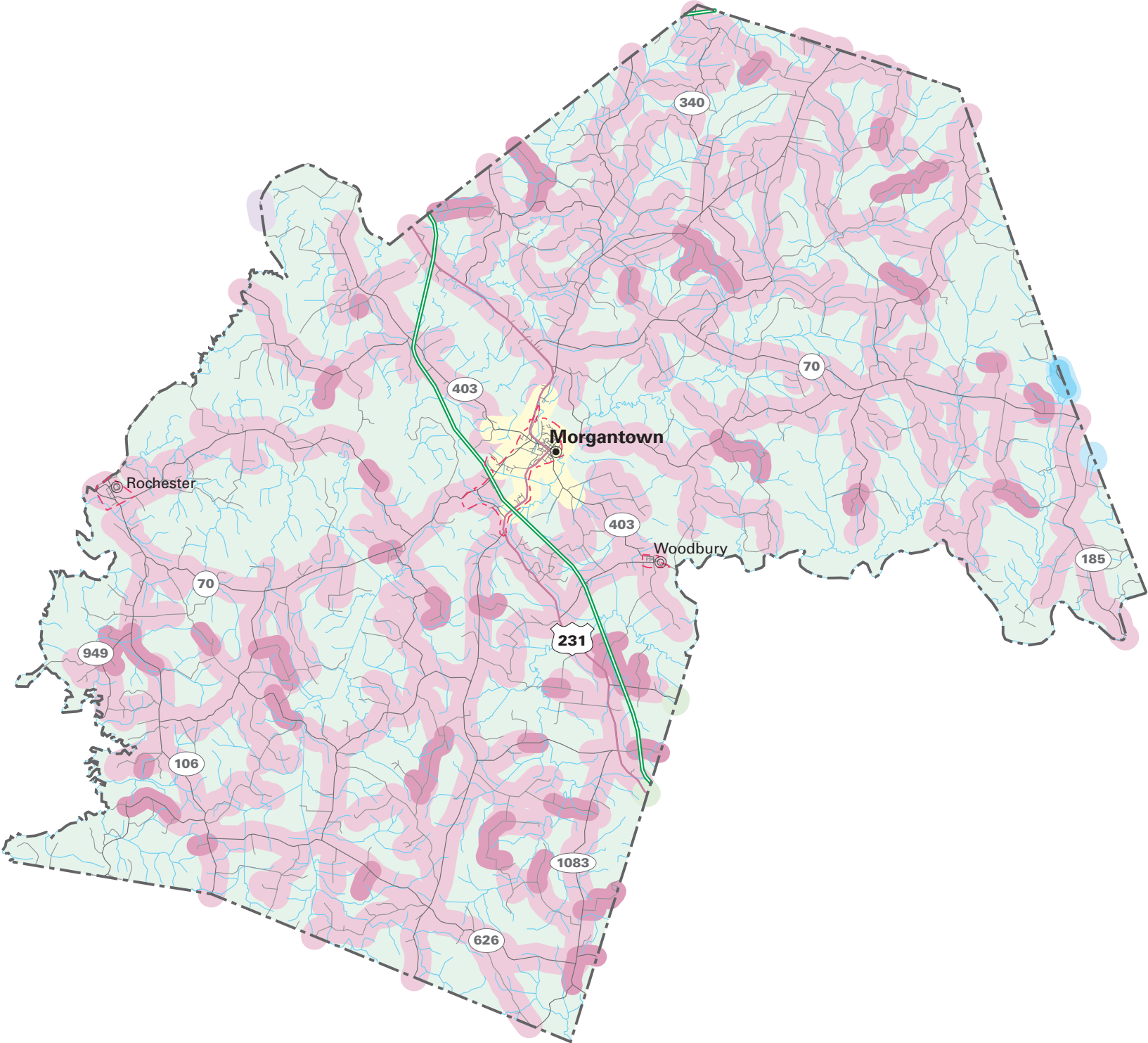
Bob Arnold, Chairman
Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By:
Kent Anness & Kim Prough

Data Collection & GIS Input By:
Kentucky Area Development Districts



LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.



WATER SERVICE STATUS BY OWNER		
EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		WARREN COUNTY WATER DISTRICT
		OHIO COUNTY WATER DISTRICT
		MORGANTOWN WATER SYSTEM
		EDMONSON COUNTY WATER DISTRICT
		BUTLER COUNTY WATER SYSTEM INCORPORATED



Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
BUTLER								
BUTLER COUNTY WATER SYSTEM, INC	.		.	395				395
MORGANTOWN				800		2,000		2,800
BUTLER COUNTY TOTAL	.		-	1,195		2,000		3,195

¹Some uncertainty, due to conflicting data, in the estimated percentage of the county served by public water.

PUBLIC WATER SYSTEMS

The residents of Butler County are presently provided water by two systems: the Butler County Water System, Inc. and Morgantown Utilities.

BUTLER COUNTY WATER SYSTEM INCORPORATED

PWSID: 0160052
 System Type: COMMUNITY
 Owner Type: WATER DISTRICT
 Surface Source: GREEN RIVER
 Purchase Source: DUNBAR
 Well Source:
 Sells Water to:
 Treatment Plant Capacity (MGD): 0.50
 Percent Daily Average Production: 43.00
 Total Tank Storage Capacity (gallons): 1,276,000.00
 Total Service Connections: 4,022.00
 Number of Employees: 5.00
 Treatment Operator Class: 2D
 Distribution Operator Class: 3A
 Customer Rate for 1,000 Gallons: 5.82
 O/M costs 1997: 681,928.15
 O/M costs per Service Connection: 170.23
 Net Revenue 1997: 96,367.69
 Total Water Produced 1997 (gallons): 209,269,030.00
 Water Sold 1997 (gallons): 221,420,132.00
 Unaccounted-for Water 1997 (%): 11.64

According to the Butler County Water Supply Plan the Green River will supply enough raw water to meet future needs. The Butler County Water System, Inc. currently serves 3,776 households in Butler County. The system purchases water from the Morgantown water treatment plant, which can produce 972,000 gallons per day. On an average day the Butler County Water System purchases approximately 338,000 gallons of water. Butler County Water System, Inc. storage system has 11 tanks in its territory. The total storage capacity of

the district is 1,276,000 gallons. The calculated charge for 5,000 gallons of treated water (residential use) is currently \$29.11. Butler County Water System, Inc. has five employees: two certified water treatment plant operators, two certified to operate the distribution system, and one for billing and financial concerns.

The Butler County Water System, Inc. is planning for 24 miles of water line extensions during the period 2000-2005 at an estimated cost of \$650,000 and an additional 15 miles of water line extensions in the period 2005-2020 at an estimated cost of \$400,000.

MORGANTOWN WATER SYSTEM

PWSID: 0160294
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source: GREEN RIVER
Purchase Source:
Well Source:
Sells Water to:.....
Treatment Plant Capacity (MGD): 0. 972
Percent Daily Average Production: 65.0
Total Tank Storage Capacity (G):..... 1,000,000
Total Service Connections: 944.00
Number of Employees: 17
Treatment Operator Class:.....2D
Distribution Operator Class:3A
Customer Rate for 1,000 Gallons: 3.50
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997: Not available
Water Sold 1997: Not available
Unaccounted-for Water 1997: Not available

Morgantown Utilities gets its water from the Green River, described in the Butler County Water Supply Plan as an adequate supply of raw water for future needs. Morgantown Utilities currently services 801 households in Morgantown. Morgantown Utilities operates the Butler County water treatment plant, which can produce 972,000 gallons per day. On an average day the plant produces approximately 580,000 gallons of water. The utilities' storage system consists of two tanks. The total storage capacity of the district is 1,000,000 gallons. The calculated charge for 5,000 gallons of treated water (residential use) is currently \$17.51. With a 33.5% increase to become effective July 1, 1999. Morgantown Utilities has 17 employees, of whom four are certified to operate the water treatment plant and two are certified to operate the distribution system.

Morgantown Utilities, Inc. has an aging infrastructure. Studies indicate Morgantown will continue to increase in population at a steady rate in the coming years. In order to serve customers, adequately the utilities' distribution system will require upgrades to increase and maintain an adequate flow and pressure. The approximate costs are outlined in the following project listings.

PRIVATE DOMESTIC SYSTEMS

About 1,200 people in Butler County rely on private domestic water supplies: 800 on wells and 400 on other sources.

In the northern two-thirds of Butler County most wells from depths of less than 300 feet are adequate for a domestic supply. Wells located in the Green River flood plain can produce as much as 100 gallons of hard water per minute. Most wells obtain their water from thick sandstone layers and will yield as much as 60 gpm. In the southern third of the county only a few well yield enough water for a domestic supply. In the central section of the county moderately mineralized water may be obtained locally from deep sandstone formations at depths of 1200 feet.

Generally, ground water is hard to very hard and iron and salt may be present in objectionable amounts. Often ground water becomes saltier with depth.
